REMARKS/ARGUMENTS

The Examiner has withdrawn the indicated allowability of dependent claim 18, which was submitted in independent form as amended claim 13 in the Amendment filed on October 23, 2006. Claim 13 has been further amended herein to correct certain informalities.

Claim 13 stands rejected under 35 U.S.C, §103(a) as being unpatentable over Mizuno (U.S. 6,805,376) in view of Iwai et al. (U.S. 7,032,925).

It is recognized by the Examiner that Mizuno fails to disclose the flow of gas through the manifold upon rupture of the manifold rupture disk being at a temperature of less than approximately 21° C, as recited in claim 13. The Examiner states that Iwai et al teaches this feature at column 7, lines 45-47, and that it would have been obvious to one having ordinary skill in the art to modify the method of generating gas of Mizuno by using the teaching of Iwai et al, in order to provide cold gas upon actuation of the gas generator. In view of the arguments submitted hereinafter, it is requested that the Examiner reconsider and withdraw the rejection of claim 13 under 35 U.S.C. §103(a) for the reason that Iwai et al fails to disclose or even suggest the novel recitation in claim 13 of the flow of gas through the manifold upon rupture of the manifold rupture disk being at a temperature of less than approximately 21° C.

Iwai et al discloses at column 7, lines 45-47 that the igniter 26 is actuated at a temperature of 20° C. The igniter 26 is disposed within the diffuser portion 20 and is adjacent to a rupturable plate 19 which closes the outflow passage 18 in the housing 12 containing a pressurized gas. Upon actuation of the igniter 26, the plate 19 is ruptured to enable pressurized gas to flow through the outflow passage 18, the diffuser portion 20, the discharge hole 22 and through the gas discharging port 40 into the airbag (not shown). Other than the 20°C temperature

at which the igniter 26 is actuated, there is no disclosure whatsoever in Iwai et al of the temperature of the gas flowing through the diffuser portion 20 and into the gas discharging port 40 after the plate 19 has been ruptured by the igniter 26. This temperature would be determined by various factors, such as the construction and operation of the igniter, the pressure of the gas in the inflator housing 12 and other factors. It is not possible from the disclosure of Iwai et al, therefore, to determine the temperature of the gas flowing through the diffuser portion 20 after rupture of the plate 19 by actuation of the igniter 26. It is apparent, however, that the operation of the igniter 26 will heat the gas flowing through the outflow passage 18 after the plate 19 is ruptured.

In contrast, Applicants' method creates a pressure wave that travels through the pressure vessel to impinge on the manifold disk and create a localized pressure to rupture the manifold disk and allow flow of gas through the manifold before the gas in the pressure vessel is significantly heated and pressurized by the gas flow from the initiator housing, wherein the flow of gas through the manifold upon rupture of the manifold rupture disk is at a temperature of less than approximately 21° C.

As stated on page 5 of Applicants' specification, the average pressure of the gas mixture 14 in the pressure vessel 12 at the time of rupture of the manifold rupture disk 18 is below the manifold disk rupture pressure for the reason that the gas has not been heated to the rupture pressure. Accordingly, high pressure, cold gas (e.g., less than 21° C) is directed through the manifold 16. The rupture of the manifold disk 18 before the gas mixture in the pressure vessel is significantly heated and pressurized by the gas flowing through the initiator disk 24 allows cool, pressurized gas to enter the manifold 18 and the device to be inflated or pressurized. This is

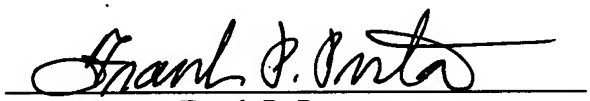
particularly advantageous in the case of an airbag where a cooler inflation gas provides for maximum up time for roll over events and the like.

It is submitted, therefore, that the teachings of Iwai et al completely fail to supply the deficiencies of Mizuno with respect to the novel recitations in claim 13. There is no disclosure in either of these references of the temperature of the gas flow through the manifold upon rupture of the manifold rupture disk. Accordingly, claim 13 should be allowable to Applicants.

Prompt and formal allowance of claim 13 is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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